

REMARKS

Claims 1 to 32 were pending in the application at the time of examination. Claims 1 to 32 stands rejected as anticipated.

Prior to addressing the rejections in detail, Applicants respectfully notes that a Revocation and Substitution of Attorney was filed in the above application by first class mail on December 15, 2004 and a return receipt postcard dated stamped "Dec 22 2004" was received indicating that the USPTO received the paper. Nevertheless, the pending office action was mailed to attorneys that are no longer responsible for the application. If the Revocation is not in the file, the Examiner is respectfully requested to notify the undersigned attorney so that a copy of the date stamped return receipt postcard and a duplicate copy can be filed. Please address all future correspondence concerning the above application to the undersigned attorney.

The disclosure stands objected to for informalities. The rejection stated "on page 3 the serial numbers of various related applications have been omitted."

Applicants respectfully traverse the objection to the disclosure. The rejection is correct with respect to the application as filed. However, on December 31, 2003, a Preliminary Amendment was filed by first class mail substituting a rewritten paragraph [002] that included the serial numbers. A return receipt postcard was date stamped "Jan 02 2004" by the USPTO and returned indicating that the Preliminary Amendment was received. Accordingly, Applicants fail to understand the basis for the objection. If the Preliminary Amendment has been lost by the USPTO, the Examiner is respectfully requested to notify Applicants' attorney and a duplicate will be filed along with a copy of the date stamped return receipt postcard. Applicants respectfully request

reconsideration and withdrawal of the objection to the disclosure.

Applicants have amended the description to correct typographical errors.

Each of Claims 3, 11, 19 and 27 has been amended to correct an antecedent basis informality. Since no 112 rejections were made, these amendments do not affect the patentability of these claims.

Claims 1 to 32 stand rejected as being anticipated by U.S. Patent No. 6,363,523, hereinafter referred to as "Chen." The rejection cited Claim 1 of Chen and stated in part:

The indicating feature is inherent when the optimizations are based on overflow potential to indicate which path is to be taken. In the preamble claim 1 of '523 indicates that it is an arithmetic overflow detection method; which, inherently provides for overflow based on the operator since only certain operations will cause or have the potential to cause overflow depending on the size of the numbers used. The relationship between the operand type and the result type is considered to provide indication of the size of the number. . . to the number generated by the operation . . . See the definition of overflow from the Microsoft Computer Dictionary for an indication of the inherent features.

Applicants respectfully traverse the anticipation rejection of Claim 1. Applicants note that the rejection admits that Claim 1 of Chen fails to disclose the invention as recited in Claim 1 of the instant application and makes an inherency argument to fill the defect. Applicants respectfully submit that the comments in the rejection do not necessarily follow from Chen and so the reliance on inherency is not well founded.

The MPEP requires:

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the

determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original) (Underline Emphasis added.)

MPEP § 2112, IV, 8th Ed., Rev. 2, p. 2100-55, (May 2004).

First, the rejection misquotes Chen. Claim 1 of Chen stated:

A method for arithmetic expression optimization, comprising:

receiving a first instruction defined for a first processor having a first base, said instruction including an operator and at least one operand;

converting said first instruction to a second instruction optimized for a second processor having a second base when said at least one operand does not carry potential overflow beyond said second base or when said operator is insensitive to overflow, said second base smaller than said first base; and

converting to a wider base a third instruction that is the source of potential overflow associated with said at least one operand when said at least one operand carries the potential for overflow beyond said second base and when said operator is sensitive to overflow, said third instruction having been previously optimized, said wider base larger than said second base and smaller or equal to said first base.

Thus, contrary to the statement in the rejection, the preamble of Claim 1 in Chen is "A method for arithmetic optimization," and not "an arithmetic overflow detection method," as stated in the rejection. Accordingly, the preamble of Chen fails to provide support for any inherency argument, and teaches away from the rejection's analysis.

Claim 1 of Chen fails to teach or suggest anything about an "indicating" operation and instead recites two converting operations based on relative sizes of bases for processors. Two conversions performed based on relative base sizes teaches away from any need for an indication operation since the

conversions are performed based on the stated conditions. Also, the decision on which conversion is done is based on relative base sizes and so fails to provide any basis for an inherency argument on how the overflow potential occurs other than the relationship of the bases.

In fact, the MPEP stated:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981).

MPEP § 2112, IV, 8th Ed., Rev. 2, p. 2100-55, (May 2004).

This statement from the MPEP is directly on point. The fact that the arguments in the rejection may occur is not sufficient to establish inherency. The rejection has failed to demonstrate that comparison of base sizes necessarily implies "whether said operand has potential overflow based at least in part on said operator and the relationship between said operand type and a result type associated with said operator." Logically, this limitation can be considered as "condition A and condition B" where "condition B" is "condition C and condition D." The rejection has not alleged or shown how this limitation is necessarily taught by Chen.

The rejection relies on a definition of overflow to justify a hypothetical example by citing to a Microsoft Dictionary that stated:

1. Generally, the condition that occurs when data resulting from input or processing requires more bits than have been provided in hardware or software to store the data.

This general statement fails to teach anything concerning how to detect a specific set of conditions and indicate a potential overflow, and instead only describes a condition that constitutes an overflow. The fact that an overflow occurs when there is storage of an insufficient size fails to provide any teaching concerning conditions that may result in overflow. Thus, this definition fails to provide the support required by the MPEP as quoted above for showing that the statements in the rejection necessarily follow from Claim 1 of Chen. Moreover, the rejection fails to assert the specific logical order of the conditions in Claim 1 are inherent. Applicants respectfully requests reconsideration and withdrawal of the anticipation rejection of Claim 1.

Claims 2 to 8 depend from Claim 1 and so distinguish over the reference for at least the same reasons as Claim 1. Applicants request reconsideration and withdrawal of the anticipation rejection of each of Claims 2 to 8.

The anticipation rejection of Claim 9 was the same as that for Claim 1. Applicants respectfully traverse the anticipation rejection of Claim 9. Applicants respectfully note that the scope of Claim 9 is different from the scope of Claim 1 and the rejection fails to note this difference in scope. Nevertheless, the above comments with respect to Claim 1 are incorporated herein by reference. Applicants request reconsideration and withdrawal of the anticipation rejection of Claim 9.

Claims 10 to 16 depend from Claim 1 and so distinguish over the reference for at least the same reasons as Claim 1. Applicants request reconsideration and withdrawal of the anticipation rejection of each of Claims 10 to 16.

The anticipation rejection of Claim 17 was the same as that for Claim 1. Claim 17 recites a program storage device that includes the same limitations as discussed above for

Claim 1. Accordingly, the above comments with respect to Claim 1 are applicable to Claim 17 and are incorporated herein by reference. Applicants request reconsideration and withdrawal of the anticipation rejection of Claim 17.

Claims 18 to 24 depend from Claim 17 and so distinguish over the reference for at least the same reasons as Claim 17. Applicants request reconsideration and withdrawal of the anticipation rejection of each of Claims 18 to 24.

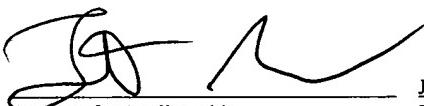
The anticipation rejection of Claim 25 was the same as that for Claim 1. Claim 25 recites an apparatus that includes the limitations equivalent to those discussed above for Claim 1. Accordingly, the above comments with respect to Claim 1 are applicable to Claim 25 and are incorporated herein by reference. Applicants request reconsideration and withdrawal of the anticipation rejection of Claim 25.

Claims 26 to 32 depend from Claim 25 and so distinguish over the reference for at least the same reasons as Claim 25. Applicants request reconsideration and withdrawal of the anticipation rejection of each of Claims 26 to 32.

Claims 1 to 32 remain in the application. Claims 3, 11, 19, and 27 have been amended. For the foregoing reasons, Applicant(s) respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant(s).

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 1, 2005.



Attorney for Applicant(s)

June 1, 2005
Date of Signature

Respectfully submitted,



Forrest Gunnison
Attorney for Applicant(s)
Reg. No. 32,899
Tel.: (831) 655-0880